CrossPoint 450 Plus / MAV Plus Matrix Switchers

Description

The Extron CrossPoint 450 Plus Series matrix switchers route RGBHV video, with or without audio, to any combination of outputs. The MAV Plus matrix switchers route component/HDTV video, S-video, or composite video (depending on the model). The switchers can route multiple input/output configurations simultaneously.

Installation and Cabling

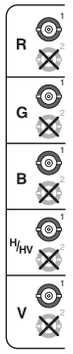
1. **Mounting —** If desired, mount the switcher(s) in a standard 19" rack.
2. **Video input connections —**

   CrossPoint 450 Plus — Connect an RGB video source to each set of input BNC connectors.

   MAV Plus — Connect a component/HDTV, S-video, or composite video source (depending on the switcher model) to each set of input BNC connectors.
3. **Video output connections —**

   CrossPoint 450 Plus — Connect an RGB video device to each set of output BNC connectors.

   MAV Plus — Connect a component/HDTV, S-video, or composite video device (depending on the switcher model) to each set of output BNC connectors.



NOTE *Connectors are grouped by video plane. Connect the input or output on each video plane to the corresponding connector in the correct group or on the correct basic module enclosure (BME). Refer to the appropriate* CrossPoint 450 Plus / MAV Plus Switcher Manual, *chapter 2, "Installation", if you are not sure.*

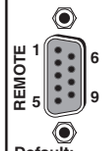
4. **Audio input and output connections (audio models) —**

   MAV Plus 128 AV RCA — Cable the switcher for stereo audio input and output. Each input and output has two RCA connectors (left and right) for unbalanced audio input and output.

   All other models — Connect balanced or unbalanced audio sources to each input 5-pole captive screw connector. Connect balanced or unbalanced audio devices to each output connector. See "Audio Connections", at right, to wire the connectors.

CAUTION *Incorrect audio connector wiring can damage the switcher.*

5. **Remote port connection —** If desired, connect a remote host to the RS-232/RS-422 port. See the drawing and table below to wire the connector.



Pin	All models RS-232	Function	Size: 2412 - 3232 RS-422	Function	All other models RS-422	Function
1	—	Not used	TX+	Transmit (+)	—	Not used
2	TX	Transmit	TX–	Transmit (–)	TX–	Transmit (–)
3	RX	Receive	RX+	Receive (+)	RX–	Receive (–)
4	—	Not used	RX–	Receive (–)	—	Not used
5	Gnd	Ground	Gnd	Ground	Gnd	Ground
6	—	Not used	—	Not used	—	Not used
7	—	Not used	—	Not used	RX+	Receive (+)
8	—	Not used	—	Not used	TX+	Transmit (+)
9	—	Not used	—	Not used	—	Not used

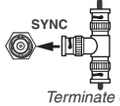
Default: RS-232, 9600, 8, N, 1

6. **Ethernet connection** – If desired, plug an RJ-45 connector into the Ethernet port to connect the switcher to a LAN/WAN or directly to a computer.

Default IP address: 192.168.254.254

7. **Remote port connection —** If desired, connect a computer to the front panel Configuration (RS-232) port. Use an optional 9-pin D to 2.5 mm mini jack TRS RS-232 cable, part #**70-335-01**.
8. **Sync connection (MAV Plus only)** – If desired, attach an external sync timing device, such as an Extron BBG 6A, to the external sync connectors. See the drawing at right.

To black burst generator



Terminate cable or connect to another device.

9. **Power —** Connect an IEC AC power cord.

Definitions

Tie — An input-to-output connection

Set of ties — An input tied to two or more outputs

Configuration — One or more ties or sets of ties

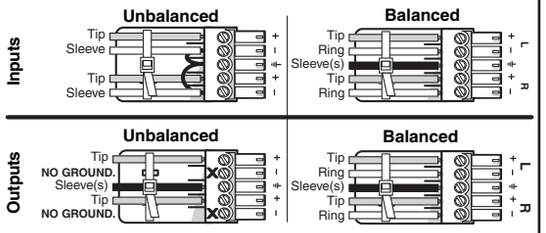
Current configuration — The currently active configuration (also configuration 0)

Global preset — A configuration that has been stored. Up to 32 or 64 global memory presets (depending on the model) can be stored in memory. Up to 20, 32, or 64 preset locations (depending on the number of input and output buttons) can be selected from the front panel to either save or retrieve a preset. When a preset is retrieved from memory, it becomes the current configuration.

Audio Connections

On audio models, audio is input to and/or output from the switcher using captive screw connectors.

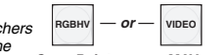
The examples below show unbalanced and balanced methods of wiring the captive screw audio connectors for input and output. If you are wiring a captive screw connector from an existing unbalanced audio cable, the white insulated wire is typically the left channel (tip) and the red insulated wire is typically the right channel (sleeve). There is no reliable standard for existing balanced audio cables.



CAUTION *Do not connect the sleeves to either the + or - terminal. Wiring errors or plugging the audio connectors incorrectly can damage the audio output circuits.*

Operations

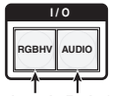
NOTE *The video selection button is labeled RGBHV on CrossPoint 450 Plus switchers and Video on MAV Plus switchers. The function is the same with either name.*



CrossPoint 450 Plus *MAV Plus*

Create tie(s)

1. Press the Esc button to clear all front panel input and output selections.
2. **Audio models**: Press the RGBHV/Video and/or Audio button to select video and/or audio.



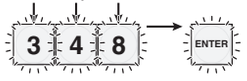
***Green** when **selected**. **Red** when **selected**.*
***Off** when **deselected**. **Off** when **deselected**.*

3. Press the desired input button.

The button lights to indicate the selection.

4. Press the desired output button(s).

Amber indicates **RGBHV**/**video** and **audio** tie.
Green indicates **RGBHV**/**video** only tie.
Red indicates **audio** only tie.



Enter blinks to indicate the need to confirm the change.

NOTE *If you push a wrong button, press the Esc button and start over.*

5. Press the Enter button.

Press the Enter button to confirm the configuration change. *The buttons for the selected input and the selected outputs turn off.*

Operations (Continued)

View ties

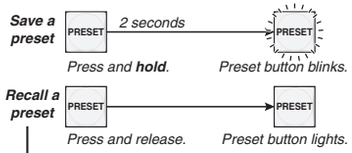
1. Press the View button. Output buttons light for outputs that have no ties established.

NOTE *If the audio button blinks, audio is broken away (switched separately from video).*
*If an output button blinks, that output is muted. To toggle mute on and off, press and **hold** the output button for 2 seconds.*

2. Press an input button. The buttons for all tied outputs light (**amber** for **video and audio**, **green** for **video** only, and **red** for **audio** only.
3. Press an output button. The buttons for the tied input and all tied outputs light.
4. Press the View button. All input and output buttons return to their unlit state.

Save or recall a preset

NOTE *Matrix sizes of 32 x 32 and smaller have 32 global memory presets. Larger matrix sizes have 64 global memory presets. Preset memory locations are assigned to the input buttons and (on matrix sizes of 16 x 16 and smaller) output buttons. 20, 32, or 64 presets (depending on the total number of input and output buttons) can be selected from the front panel.*

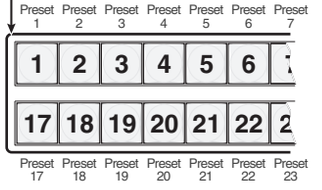


1. The save preset operation and recall preset operation are both initiated using the Preset button.

   Save a preset — Press and **hold** the Preset button for 2 seconds.

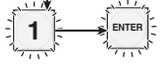
   Recall a preset — Press and release the Preset button.

*All input buttons with assigned presets light **red**. **The configuration data at assigned preset locations will be overwritten**.*



2. Press the appropriate input button to select the desired preset number.

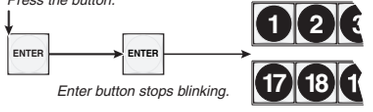
*The button blinks **red** to indicate that this **preset** is selected to save or recall.*



*The Enter button blinks **green** to indicate the need to activate the save or recall.*

3. Press the Enter button. All input buttons and the Enter button go out. The current configuration is saved to or retrieved from the selected preset location.

Press the button. *All input buttons and output buttons go out.*



Enter button stops blinking.

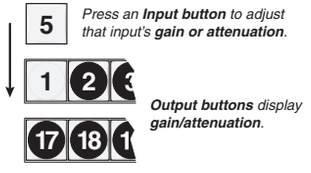
Adjust the input audio level and output volume (audio models)

1. Press and **hold** the Audio Setup (I/O) button for approximately 2 seconds.

Hold Audio button blinks.

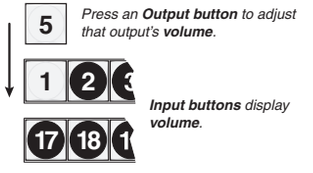
2. Press and release the desired input button or output button.

Press an **input** button to adjust that input's audio level. The **output buttons** display the **gain** or **attenuation** level.
Press an **output** button to adjust that output's volume level. The **input buttons** display the **volume** level.



*Press an **Input button** to adjust that input's **gain or attenuation**.*

***Output buttons** display **gain/attenuation**.*



*Press an **Output button** to adjust that output's **volume**.*

***Input buttons** display **volume**.*

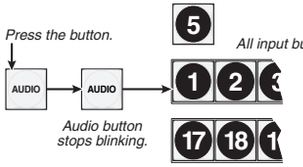
The more lit or blinking buttons, the greater the level. For the input level display, **green** indicates **gain** and **red** indicates **attenuation**. Refer to the appropriate *CrossPoint 450 Plus / MAV Plus Switcher User's Manual* chapter 3, "Operation", to read the audio displays.

3. Press and release the View (▲) and Esc (▼) buttons to decrease or increase the gain or attenuation for the selected input or the volume for the selected output by 1 step per push of the button or press and hold to ramp the level up or down.

▼ *button decreases the input level or volume.* ▲ *button increases the input level or output volume.*

4. Press and release the Audio button to save changes and exit Audio mode.

Press the button. *All input buttons and output buttons turn off.*



Audio button stops blinking.

Legend:

= lit,

= unlit or background illumination

= blinking.

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